



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/673,521

09/30/2003

Mark R. Player

038073-5002 US

1436

9629 7590 07/23/2007  
MORGAN LEWIS & BOCKIUS LLP  
1111 PENNSYLVANIA AVENUE NW  
WASHINGTON, DC 20004

EXAMINER
----------

BALASUBRAMANIAN, VENKATARAMAN

ART UNIT	PAPER NUMBER
----------	--------------

1624

MAIL DATE	DELIVERY MODE
-----------	---------------

07/23/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/673,521

**Applicant(s)**

PLAYER ET AL.

**Examiner**/Venkataraman  
Balasubramanian/**Art Unit**

1624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16, 31-33, 43 and 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-4, 6, 7, 10 and 33 is/are allowed.
- 6) ☒ Claim(s) 1, 5, 8, 9, 11-16, 31, 32, 43 and 44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicants' response, which included amendment to claims 1 and 2, filed on 6/29/2007, is made of record. Claims 1-16, 31-33, 43 and 44 are pending. Although applicants' traversal asserting and alkyl is same as alkylene group was not persuasive, in view of amendment to claims 1 and 2 to recite specific alkylene groups, 112 rejection made in the previous has been obviated. Upon further consideration the Finality of the previous office action is withdrawn to apply new ground of rejections.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 11-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1. Process claims 11-16 are indefinite as they refer to formulae I, II, III, and IV but no such formulae is provide in these claims. Note these claims are independent claims. Hence, it is not clear what processes are embraced in these claims and for what products.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Art Unit: 1624

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Meisel et al., US 4, 600,776.

See example 3.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Jensch et al., DE 606497.

See page 3 and page 5, examples 7 and example 12 respectively.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Weinswig et al., Journal of Pharmaceutical Sciences, 54(5), 807-808, 1965; CA 63: 39091, 1965. CAPLUS Abstract provided.

See compound shown in the CAPLUS abstract.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Foye et al., Journal of the Pharmaceutical Association, Scientific Edition, 41, 385-387, 1953; CA 47: 34975, 1953. CAPLUS Abstract provided.

See compound shown in the CAPLUS abstract.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1624

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 5, 8, 9, 31, 32, 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Erickson et al. WO 01/47921 (provided in the IDS).

Erickson et al. teaches several trisubstituted triazines, which include compounds of claimed in the instant claims, for the treatment of diabetes, asthma, tumor etc. See page 4, formula I, and note the definition of X, X<sup>1</sup>, X<sup>2</sup>, Y, R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and R<sup>4</sup>. Note with these definitions, compounds taught by Erickson et al. include instant compounds. More specifically, when R<sup>2</sup> is hydroxy, R<sup>1</sup> is heteroaryl or heteroaryl alkyl, R<sup>3</sup> is a direct bond and R<sup>4</sup> is CONHR<sup>15</sup> or CO(CH<sub>2</sub>)<sub>0-2</sub>R<sup>16</sup>, compounds of the reference include instant

Art Unit: 1624

compounds. Also note when  $R^3$  is direct bond,  $R^4$  is  $OR^{18}$ ,  $R^1$  is heteroaryl and  $R^2$  is  $R^7-R^6-N-R^5$ , the compounds taught by the reference include instant compounds.

See pages 4 through 11 for preferred embodiments and pages 23-35 for process of making. See pages 36-54, Table 1 for compounds made. Especially note the table shows several diaminosubstituted-chloro-triazine compounds.

Erickson et al. differs from the instant claims in not exemplifying hydroxy compound or  $OR^{18}$  bearing triazine as well as all compounds generically taught and claimed.

However, Erickson et al. teaches the equivalency exemplified examples of trisubstituted triazine core seen in Table 1 with those claimed therein in the definition of various variable groups of formula I. See definition of X,  $X^1$ ,  $X^2$ , Y,  $R^1$ ,  $R^2$ ,  $R^3$  and  $R^4$ . and preferred embodiments of these groups in pages 4-11.

Thus it would have been obvious to one having ordinary skill in the art at the time of the invention was made to make compounds variously substituted the triazine ring including hydroxy and  $OR^{18}$  groups as permitted by the reference and expect resulting compounds (instant compounds) to possess the uses taught by the art in view of the equivalency teaching outline above.

#### ***Allowable Subject Matter***

Claims 2-4, 6, 7, 10 and 33 are allowed.

#### **Conclusion**

Any inquiry concerning this communication from the examiner should be addressed to Venkataraman Balasubramanian (Bala) whose telephone number is (571)

Art Unit: 1624

272-0662. The examiner can normally be reached on Monday through Thursday from 8.00 AM to 6.00 PM. The Supervisory Patent Examiner (SPE) of the art unit 1624 is James O. Wilson, whose telephone number is 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAG. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-2 17-9197 (toll-free).

  
Venkataraman Balasubramanian

7/19/2007